

# COASTAL CONSERVANCY

Staff Recommendation  
October 21, 2010

## NAPA RIVER SALT MARSH RESTORATION PROJECT

Project No. 01-022-01  
Project Manager: Betsy Wilson

**RECOMMENDED ACTION:** Authorization to disburse up to \$75,000 to support the design, permitting, and other work associated with implementation of the Napa River Salt Marsh Restoration Project.

**LOCATION:** The northern edge of San Pablo Bay, bounded in the east by the Napa River and the west by Sonoma Creek, in Napa County (Exhibit 1)

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

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### **EXHIBITS**

Exhibit 1: [Project Location and Site Map](#)

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### **RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160-31165 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of up to seventy-five thousand dollars (\$75,000) to support the design, permitting, and other work associated with implementation of the Napa River Salt Marsh Restoration Project.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the Conservancy’s current Project Selection Criteria and Guidelines.
2. The proposed project is consistent with Chapter 4.5 of Division 21 of the California Public Resources Code (Sections 31160-31165) regarding the Conservancy’s mandate to address the resource and recreation goals of the San Francisco Bay Area.”

**PROJECT SUMMARY:**

The Napa River Salt Marsh Restoration Project involves the restoration of nearly 10,000 acres of former commercial salt ponds to a mix of tidal marsh and managed ponds, as well as delivery of recycled water to aid in the removal of bittern (a byproduct of salt production) that is stored in one of the ponds. The project is located along the western edge of the lower Napa River, is owned by the California Department of Fish and Game (“DFG”), and is managed as part of the Napa River Unit of the Napa Sonoma Marshes State Wildlife Area.

Phases I and II of the project were completed by the State in 2006 and 2007, respectively. Phase I involved opening 3,000 acres of salt ponds (Ponds 3, 4, and 5) to full tidal action, making this the largest tidal habitat restoration in San Francisco Bay to date. Phase II involved restoration of 1,700 acres (Ponds 1, 1A, and 2) to managed ponds for waterfowl and shorebirds. Phase III, restoration of the final 1,870 acres (Ponds 6, 6A, 7, 7A, and 8) and design and construction of a recycled water pipeline to aid in bittern removal from Pond 7, is expected to begin construction in 2011. Phase III will be constructed by the U.S. Army Corps of Engineers (“Corps”), with DFG serving as the non-federal sponsor.

This authorization would enable the Conservancy to disburse up to \$75,000 to support the design, permitting, and other work associated with implementation of the Napa River Salt Marsh Restoration Project. Funds would be used to assist with permitting activities, completion of final design documents, preparing construction bid documents and bid solicitation, and coordination between the Corps and DFG for Ponds 6, 6A, 7, 7A, and 8 (“Ponds 6-8”) improvements. Funds could also be used for other technical services as needed to implement the project. By contracting directly for these technical services, the Conservancy can help keep the Ponds 6-8 improvements on track for a construction start in Federal Fiscal Year (“FFY”) 2011.

In November 2007, the Napa River Salt Marsh Restoration Project was authorized in the federal Water Resources Development Act (“WRDA”) of 2007. During the two FFYs following WRDA 2007 authorization, no federal funding was allocated to the project. In FFY 2010, the project was allocated \$100,000 in federal construction funding. While the federal funding was significantly less than requested, the Napa River Salt Marsh project held the high distinction of being the only environmental restoration project among a limited number of new construction starts in FFY 2010. It is anticipated that the project will be appropriated \$12 million in federal funding for FFY 2011 (there is \$12 million in the President’s budget and both the Senate and House mark-ups).

The Corps is using the FFY 2010 federal funding to work on project partnership agreement negotiations, design review, and permitting efforts. However, the limited federal funds are not sufficient for the Corps to be able to complete the necessary design and permitting work to get the Ponds 6-8 improvements ready to start construction in 2011. If authorized, the Conservancy funds will enable the permitting and design work to move forward until the project receives additional federal funding. Without the Conservancy’s assistance, it will be difficult to get the Ponds 6-8 improvements ready to start construction in 2011 and the project will likely not be able to utilize the \$12 million in federal funding appropriated to the project for FFY 2011.

Conservancy staff does not foresee the need for any Conservancy financial contributions for construction of the Napa River Salt Marsh Restoration Project, including the Ponds 6-8 improvements. To date, non-federal agencies (i.e., Conservancy, California Bay-Delta Authority, Wildlife Conservation Board, DFG, and Sonoma County Water Agency) have

contributed over \$18 million for design and construction, plus \$10 million for land acquisition. A significant portion, if not all, of these funds will be credited towards the Corps' non-federal cost share requirements. With a 65% federal to 35% non-federal cost-share ratio in the WRDA 2007 authorization, no additional non-federal funds should be required to complete the construction of the project.

The Napa River Salt Marsh Restoration Project is supported by scientists and resource managers represented by over 15 agencies and other organizations involved in this project, and by state and federal legislators representing this area, and is a recommendation of the San Francisco Baylands Ecosystem Habitat Goals Report. The project is expected to serve as a model for restoration of commercial salt ponds in the South San Francisco Bay, acquired by the state and federal governments in 2003.

**Site Description:** The Napa River Salt Marsh Restoration Project includes approximately 10,000 acres of the Napa-Sonoma Marsh Complex. The Napa River Salt Marsh was first diked off from the San Pablo Bay during the 1850s for hay production and cattle grazing. Much of the land was later converted to salt ponds, for salt production by the solar evaporation of bay water. In the early 1990s, the Cargill Salt Company ceased the production of salt and sold 9,850 acres of evaporator ponds and associated remnant sloughs and wetlands on the west side of the Napa River to the State of California for \$10 million. These ponds and remnant marshes and sloughs are now managed by DFG as the Napa River Unit of the Napa-Sonoma Marshes State Wildlife Area.

The entire Napa-Sonoma Marsh Complex is spread over an area of approximately 38,000 acres. It includes more than nine miles of shoreline between the Napa River and Tolay Creek in Sonoma County. Its northern boundary is the upper limit of the historic tidelands. Most of the former tidal wetlands in the Napa-Sonoma Marsh Complex have been converted to salt ponds or diked agricultural grazing lands.

Although the marsh complex is degraded, it provides habitat for a number of threatened or endangered species including the California clapper rail, California black rail, salt marsh harvest mouse, San Pablo song sparrow, Sacramento River winter-run chinook salmon, Steelhead trout, Sacramento splittail (fish), Delta smelt (fish), and Mason's lilaeopsis (plant). The former salt ponds in the Napa-Sonoma Marsh Complex provide habitat for large populations of waterfowl and shorebirds.

**Project History:** An estimated 85 percent of the historic tidal marshes in the San Francisco Bay-Delta Estuary have been filled or significantly altered over the past two centuries. The San Pablo Bay's diked baylands provide an opportunity for large-scale restoration of tidal marsh. Over the last decade, state and federal resource and regulatory agencies have purchased a number of properties within the Napa-Sonoma Marsh Complex, with the intent to restore much of the land to tidal marsh. Acquisitions include: U.S. Fish and Wildlife acquisition of the 1,400-acre Cullinan Ranch, DFG's acquisition of nearly 10,000 acres of former Cargill Salt Ponds and 62 acres along Huichica Creek, and the transfer of Skaggs Island to the U.S. Fish and Wildlife Service. In 1994, the Conservancy disbursed \$1 million to assist in the \$10 million DFG acquisition of the Cargill Salt Ponds (Napa Salt Marsh).

Following are key events in the Napa River Salt Marsh Restoration Project since the property was acquired by DFG in 1994:

- The Feasibility Study was completed in December 2004 with the signing of the Feasibility Report by the Corps' Chief of Engineers.
- In 2004-2005, the Conservancy used CALFED grant funds to contract an engineering firm to prepare design documents for Ponds 3-5. Simultaneously, DFG engineers produced design documents for Ponds 1-2.
- Ducks Unlimited completed construction of Phase I (Ponds 3-5) of the project in 2006 and completed Phase II (Ponds 1-2) in 2007. The CALFED Bay-Delta Program contributed \$4.5 million in state funds for final design, monitoring, and construction of Ponds 3-5 and the Wildlife Conservation Board contributed approximately \$12 million in state funds towards construction of Ponds 1-5.
- In 2006-2008, the Conservancy contracted with an engineering firm to prepare 90% design documents for Ponds 6-8.
- In November 2007, the Napa River Salt Marsh Restoration Project was authorized in the Water Resources Development Act of 2007.
- The project received \$100,000 in federal construction general funds for FFY 2010, marking the first federal construction funding the project has received (referred to as a "new start"). There were only five construction new starts in FFY 2010 and, of these, the Napa River Salt Marsh Restoration Project was the only environmental restoration project.
- The project will likely be appropriated \$12 million in federal construction general funds for FFY 2011.

To date, non-federal agencies have contributed over \$18 million for design and construction, plus \$10 million for land acquisition. With a 65% federal to 35% non-federal cost-share ratio in the WRDA 2007 authorization, no additional non-federal funds should be required to construct the remaining phases of the Napa River Salt Marsh Restoration Project.

## PROJECT FINANCING

Coastal Conservancy	<u>75,000</u>
<b>Total Project Costs</b>	<b>\$75,000</b>

The anticipated source of Conservancy funds is the fiscal year 08/09 appropriation to the Conservancy from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) (Public Resource Code Sections 75001 et seq.). Consistent with Section 75060, the proposed project will protect and restore natural habitat values of a watershed of San Francisco Bay and is consistent with Chapter 4.5 of Division 21, as discussed below.

Proposition 84 also requires that for restoration projects that protect natural resources, the Conservancy assess whether the project meets at least one of the criteria specified in Section 75071(a)-(e). The proposed project satisfies four of the specified criteria as follows: 1) consistent with subsection (a), the project will protect and enhance the biological diversity and integrity of a large block of linked, unfragmented habitat; 2) consistent with subsection (b), the project will contribute to the long-term protection of and improvement to the water and

biological quality of the Napa River watershed, a watershed which drains to the San Francisco Bay estuary; 3) consistent with subsection (c), the project will result in restoration of nearly 10,000 acres to a mix of tidal marsh and managed ponds, major habitat types that have been heavily disturbed and widely destroyed around San Francisco Bay and the State, and 4) consistent with subsection (e), non-state matching funds from the federal government are being contributed toward construction of the final phase of the project and post-construction monitoring and management activities.

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

The project is undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area.

The Napa River Salt Marsh is located in Napa and Solano Counties, consistent with Section 31162 of the Public Resources Code, which authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area.

Under Section 31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The ultimate implementation of the Napa River Salt Marsh restoration project would restore and enhance nearly 10,000 acres of wetlands, and would be a habitat restoration project of regional and national significance.

Consistent with Section 31162(c), the Napa River Salt Marsh Restoration Project would implement the policies and programs of the San Francisco Bay Plan, as described in the "Consistency with the San Francisco Bay Plan" section of this staff recommendation.

Under Section 31162(d), the Conservancy may act to promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations for recreational and educational purposes. Napa River Salt Marsh provides an important open space resource for recreational purposes. The Napa River Salt Marsh Restoration Project includes a recreational component, which focuses on hunting, fishing, birdwatching, and boating.

Consistent with Section 31163(c), the Napa River Marsh Restoration Project is: (1) supported by adopted regional plans (San Francisco Bay Plan), (2) serves a regional constituency, as the Napa River Salt Marsh is a hunting, fishing, birdwatching, and boating destination for the Bay Area, (3) can be implemented immediately, (4) provides benefits that would be lost if the project is not quickly implemented, and (5) includes significant matching funds.

**CONSISTENCY WITH CONSERVANCY'S 2007  
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 10, Objective B**, the proposed project will assist in the development of plans (i.e., design, construction, and permit documents) for nearly 10,000 acres of wetlands restoration and enhancement.

**CONSISTENCY WITH CONSERVANCY'S  
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on June 4, 2009, in the following respects:

**Required Criteria**

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** In addition to widespread support within the Bay Area Congressional Delegation and by State Senators and Assemblymembers, restoration of the Napa-Sonoma Marshes is supported by Sonoma County Water Agency, the San Francisco Bay Joint Venture, The Bay Institute, Ducks Unlimited, Save The Bay, and the National Audubon Society. In addition, staff from the U.S. Fish and Wildlife Service, NOAA Fisheries, U.S. Geological Survey, the San Francisco Bay Regional Water Quality Control Board, and the San Francisco Bay Conservation and Development Commission support the project and participated in the restoration design process.
4. **Location:** The Napa-Sonoma Marsh lies in the nine-county San Francisco Bay Area, consistent with Section 31162 of the Public Resources Code.
5. **Need:** Conservancy funds are needed at this time to keep the permitting and design work moving forward until the project receives additional federal funding. Without the Conservancy's assistance, it will be difficult to get the project ready to start construction in 2011 and the project will likely not be able to utilize the \$12 million in federal funding that will likely be appropriated to the project for FFY 2011.
6. **Greater-than-local interest:** The entire Napa-Sonoma Marsh Complex consists of approximately 38,000 acres of tidelands and diked historic baylands. The proposed project will contribute to the restoration and enhancement of nearly 10,000 acres of former salt ponds along the Napa River. Restoration or enhancement of the salt ponds will provide numerous direct and indirect benefits to a large number of species and habitats. These include anadromous and Delta-dependent fish species, including the federally-endangered Delta Smelt and Steelhead Trout, along with numerous species of waterfowl and shorebirds, and several threatened or endangered species, including the California clapper rail, California black rail, salt marsh harvest mouse, and San Pablo song sparrow.
7. **Sea level rise vulnerability:** During the feasibility study phase of the Napa River Salt Marsh Restoration Project, a 50 cm (16 inch) sea level rise factor was included in analysis of tidal habitat evolution; this analysis determined that habitat development should be able to keep up with or exceed sea level rise. In addition, the project has an adaptive management plan which provides response flexibility if negative impacts due to sea level rise are detected.

### **Additional Criteria**

8. **Urgency:** There is an urgent need to protect existing wildlife habitat from uncontrolled salt or bittern releases and improve pond management for migratory shorebirds and waterfowl.
9. **Resolution of more than one issue:** The Napa River Salt Marsh Restoration Project is intended to solve DFG management problems, improve managed pond habitat for migratory birds, restore large areas of tidal marsh for endangered species and migratory birds, and enhance public access and recreational opportunities.
10. **Leverage:** See the “Project Financing” section above.
11. **Innovation:** The proposed project is expected to be a model for how to coordinate a scientifically sound, complex restoration project. The experience gained with the North Bay salt pond restoration will be invaluable as restoration planning and implementation proceeds in the South Bay. The lessons learned can also be applied to smaller scale restorations throughout the Bay Area.
12. **Readiness:** The Conservancy has the ability to contract for the technical services as soon as funding is authorized.
13. **Realization of prior Conservancy goals:** “See “Project History” above.”
14. **Cooperation:** The Napa River Salt Marsh Restoration Project involves numerous public agencies, nongovernmental agencies, landowners, and funders. The Napa Sonoma Marsh Restoration Group meets regularly to coordinate work and cooperate on restoration projects within the 38,000-acre Napa-Sonoma Marshes.
15. **Minimization of greenhouse gas emissions:** In their review of current literature on the ability of tidal salt marshes to sequester carbon, Trulio, et al. (2007)<sup>1</sup> find that, from the standpoint of habitat restoration, restoring tidal salt marshes is one of the most effective measures for sequestering carbon. Besides being extremely productive habitats, tidal marshes remove significant amounts of carbon from the atmosphere.

### **CONSISTENCY WITH SAN FRANCISCO BAY PLAN:**

The Napa River Salt Marsh Restoration Project is within the permit jurisdiction of the San Francisco Bay Conservation and Development Commission (“BCDC”).

The project is consistent with the following policies of BCDC's San Francisco Bay Plan as reprinted in February 2008:

#### **Part III: The Bay as a Resource**

##### **Water Quality**

- Policy 1 - The Bay’s tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality (page 19).

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<sup>1</sup> Trulio, L., J. Callaway, S. Crooks. 2007. White Paper on Carbon Sequestration and Tidal Salt Marsh Restoration.

Tidal Marshes and Tidal Flats

- Policy 4 - Where and whenever possible, former tidal marshes and tidal flats that have been diked from the Bay should be restored to tidal action in order to replace lost historic wetlands or should be managed to provide important Bay habitat functions, such as resting, foraging and breeding habitat for fish, other aquatic organisms and wildlife. As recommended in the Baylands Ecosystem Habitat Goals report, around 65,000 acres of areas diked from the Bay should be restored to tidal action (page 23).

**Part IV: Development of the Bay and Shoreline**

Salt Ponds

- Policy 2 - If the owner of any salt ponds withdraws any of the ponds from their present uses, the public should make every effort to buy these lands and restore, enhance or convert these areas to subtidal or wetland habitat. This type of purchase should have a high priority for any public funds available, because opening ponds to the Bay represents a substantial opportunity to enlarge the Bay and restoring, enhancing or converting ponds can benefit fish, other aquatic organisms and wildlife, and can increase public access to the Bay (page 65).
- Policy 3 - Any project for the restoration, enhancement or conversion of salt ponds to subtidal or wetland habitat should include clear and specific long-term and short-term biological and physical goals, success criteria, a monitoring program, and provisions for long-term maintenance and management needs (page 65).

**COMPLIANCE WITH CEQA:**

Under 14 California Code of Regulations (“CCR”) Section 15262, feasibility and planning activities are statutorily exempt from California Environmental Quality Act (“CEQA”) review. Similarly, 14 CCR Section 15306 categorically exempts basic data collection, research, and resource-evaluation activities which do not result in a serious or major disturbance to an environmental resource. Upon approval, staff will file a Notice of Exemption for the project.